

1. (Amended Twice) A method for treating or inhibiting atherosclerosis in a mammal, comprising:

providing an agent for inhibiting interaction between P-selectin and a ligand of P-selectin[,] and between E-selectin and a ligand of E-selectin; and

administering said agent to a mammal in need of such treatment so as to cause such inhibition to occur.

5. (Amended) The method of claim 1 wherein said ligand of P-selectin comprises a carbohydrate.

6. (Amended) The method of claim 1 wherein said ligand of P-selectin comprises a glycoprotein.

7. (Amended) The method of claim 1 wherein said ligand of P-selectin is selected from the group consisting of sialyl-Lewis x, sialyl-Lewis a, sialyl-Lewis x-pentasaccharide, polylactosaminoglycan, carbohydrate containing 2,6 sialic acid, Lewis x 3'-O-sulfate, heparin oligosaccharides, PSGL-1, 160 kD monospecific P-selectin ligand and lysosomal membrane glycoproteins.

8. (Amended) The method of claim 1 wherein said ligand of P-selectin is on a cell selected from the group consisting of monocytes, neutrophils, eosinophils, CD4⁺ T cells, CD8⁺ T cells, and natural killer cells.

9. (Amended) The method of claim 1 wherein said ligand of P-selectin is on a leukocyte.

12. (Amended) The method of claim 1 wherein said P-selectin can bind to said ligand of P-selectin in the absence of said agent.

13. (Amended) The method of claim 1 wherein said agent is selected from the group consisting of a soluble form of at least a portion of said P-selectin and a soluble form of at least a portion of said ligand of P-selectin and mixtures thereof.

20. (Amended) The method of claim 19 wherein said inhibitory carbohydrate is selected from the group consisting of sialyl-Lewis x and its analogs, sialyl-Lewis a and its analogs, [heparin oligosaccharides] and carbohydrates containing 2,6 sialic acid.

24. (Amended) The method of claim 1 wherein said agent is selected from the group consisting of an analog of said P-selectin and an analog of said ligand of P-selectin and mixtures thereof.

27. (Amended) The method of claim 1 wherein said agent is an inhibitor of a molecule required for the synthesis, post-translational modification or functioning of said P-selectin or said ligand of P-selectin.

28. (Amended Twice) The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand of P-selectin and between said E-selectin and said ligand of E-selectin so as to at least partially inhibit formation of an atherosclerotic fatty streak.

29. (Amended Twice) The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand of P-selectin and between said E-selectin and said ligand of E-selectin so as to at least partially inhibit formation of an atherosclerotic intermediate lesion.

30. (Amended Twice) The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand of P-selectin and between said E-selectin and said ligand of E-selectin so as to at least partially inhibit formation of an atherosclerotic fibrous plaque.

31. (Amended Twice) The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand of P-selectin and between said E-selectin and said ligand of E-selectin so as to at least partially inhibit growth of an atherosclerotic lesion after a surgical procedure for at least partially inhibiting restenosis.

32. (Amended) The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand of P-selectin and between said E-selectin and said ligand of E-selectin so as to at least partially reverse a formed atherosclerotic fatty streak.

33. (Amended) The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand of P-selectin and between said E-selectin and said ligand of E-selectin so as to at least partially reverse a formed atherosclerotic intermediate lesion.

34. (Amended) The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand of P-selectin and between said E-selectin and said ligand of E-selectin so as to at least partially reverse a formed atherosclerotic fibrous plaque.

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38. (Amended Twice) A therapeutic agent in a dosage form and concentration suitable for treating or inhibiting atherosclerosis in a mammal in need of such treatment, said agent being effective to inhibit interaction between P-selectin and a ligand of P-selectin and between E-selectin and a ligand of E-selectin.

Add the following new claims 40-47:

40. (New) The method of claim 19 wherein said inhibitory carbohydrate is a heparin oligosaccharide.

41. (New) The method of claim 13 wherein said agent is administered at a dose of about 1 to about 100 mg/kg body weight.

42. (New) The method of claim 19 wherein said agent is administered at a dose of about 0.01 to about 200 mg/kg body weight.

43. (New) The method of claim 23 wherein said agent is administered at a dose of about 1 to about 100 mg/kg body weight.

44. (New) The method of claim 1 wherein said ligand of P-selectin is on a platelet.

45. (New) The method of claim 1 wherein said agent further inhibits interaction between L-selectin and a ligand of L-selectin.

46. (New) A method for treating or inhibiting atherosclerosis in a mammal, comprising:

providing an agent for inhibiting interaction between P-selectin and a ligand of P-selectin and between L-selectin and